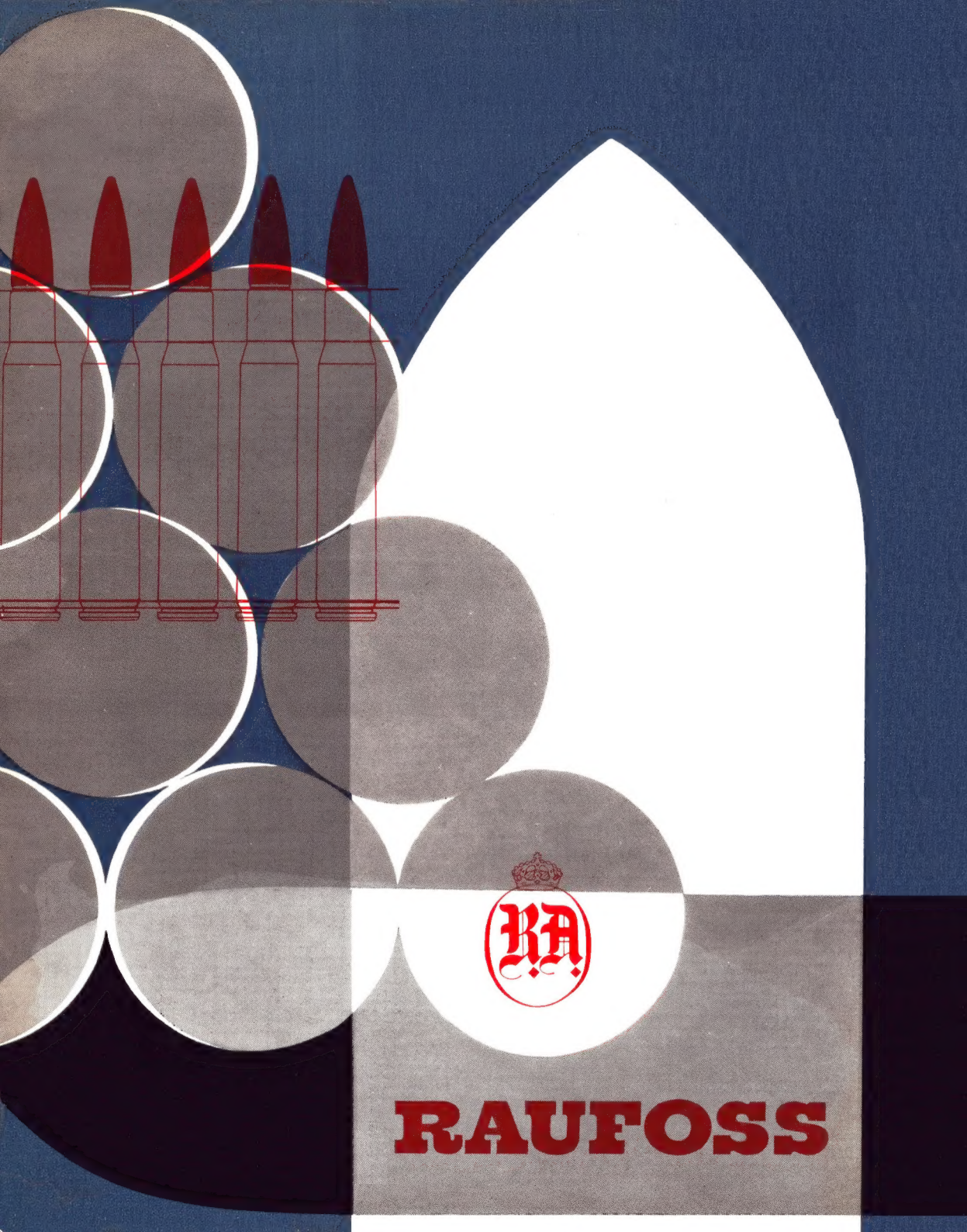

RA
RAUFOSS

An invitation...

Raufoss is not known to the hosts of tourists visiting Norway every year, because Raufoss is not on the map as a tourist attraction.

However, should you visit Norway and be interested in our line of business, we sincerely hope you will take time off to pay us a visit.

As stated in The Saturday Evening Post some years ago, we probably have the largest underground factory in the world. But we will not keep you underground for the whole of your visit. Summer or vinter, Raufoss offers you some typical Norwegian scenery which we are sure you will enjoy.

You will observe the crown in our trade mark. Raufoss Ammunition Works were established by the Royal Norwegian Government in 1896. Since 1948, however, the plant is run as an independent concern, organized along the lines of a privat company, under a board of directors, the majority of which are Norwegian industrialists and business men.

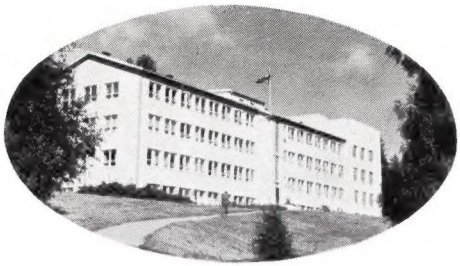
The name of the company indicates that we are manufacturing ammunition. The production which includes small arms ammunition, artillery ammunition, rockets, ammunition components, propellent powder and pyrotechnical signal equipment, is controlled and inspected by the Norwegian Army Ordnance Inspection Department.

We are suppliers of ammunition to the armed forces of Norway and other European countries as well as to the United States Army Ordnance Industrial Center in Europe.

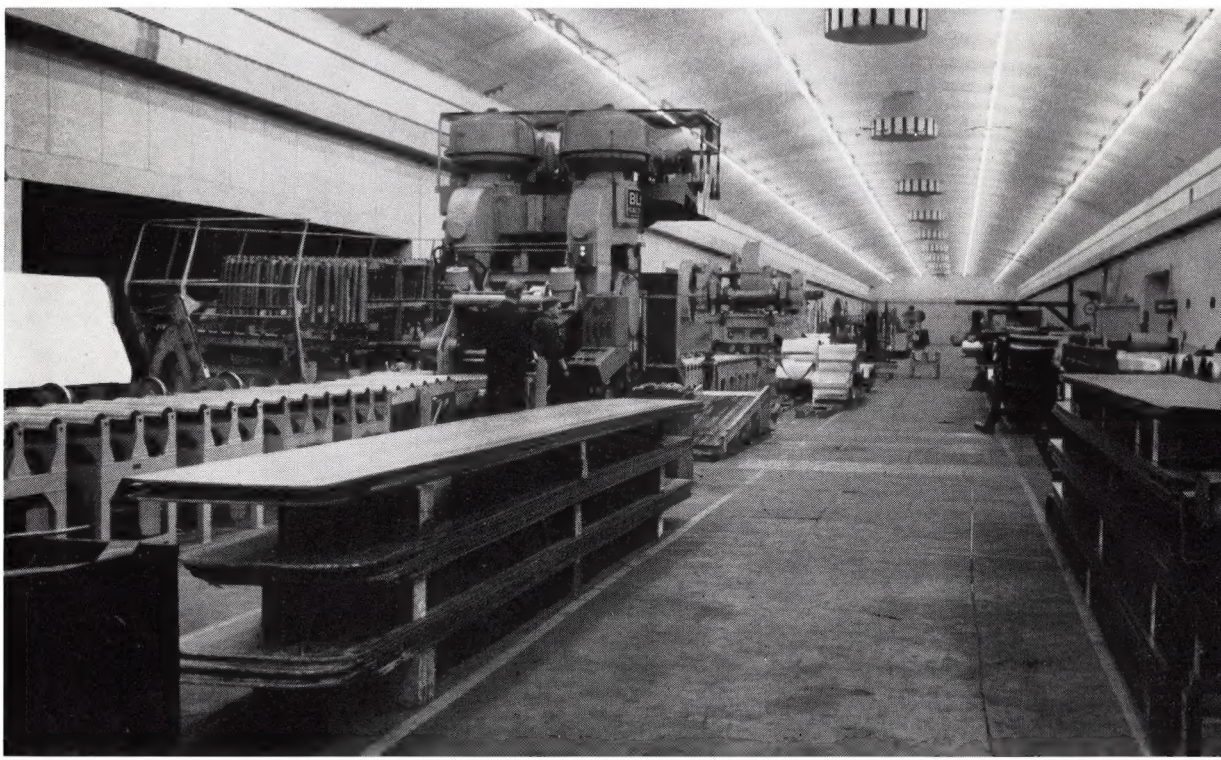
But ammunition is just a part of our total programme. We are equipped for mass production of metal, light alloy and steel products, and our metal works are ready to meet any demand for rolled, hot forged, die-cast pressed, extruded and drawn semi-products.

On the next pages you will find a few glimpses from the factory. But we would like to show it to you in person. Come for business or just to see us — we think you will find it worth while.

RAUFOSS AMMUNISJONSFABRIKKER – RAUFOSS – NORWAY



you enter by way of a slick modern office building above ground — —



to the largest underground industry in the world

«The great Raufoss ammunition factory has been snuggly beneath the surface, with 180 feet of rock for a ceiling, since 1954. This is the largest underground industry in the world — unless a bigger one lurks behind the Iron Curtain. I spent several hours in the Raufoss works, and had to keep reminding myself that I was under the ground, so cleverly has this fact been disguised for the comfort of the 2000 people* who work here. Rock walls and roofs are enirely sealed over. You enter by way of a slick modern office building above ground and descend an ordinary stairway. Then you take a quarter-mile stroll into the nether regions along what resembles a Manhattan subway tube, with track below and a shelving platform along one side.»

(The Saturday Evening Post of March 16, 1957)

* 2000 people were the total number employed at that time, both aobve and below the surface.

RAUFOSS is a small place of about 4000 inhabitants, most of whom are connected with Raufoss Ammunition Factories in one capacity or other.

The predominant role played by our plant in the local sphere of activity makes people feel strongly attached to it, and you can often find three generations, — father, son and grandson employed here simultaneously. People, who move to Raufoss, usually settle here for good, signifying their satisfaction with the plant as an employer and with Raufoss as a good place in which to live.

We are therefor always ensured a nucleus of highly skilled and experienced workers, fond of the plant and proud of their ability to master a difficult trade. Thus, professional pride has a natural place in the upbringing of the younger generations as they already have had their first initiation into inspiring conditions before entering industrial life.

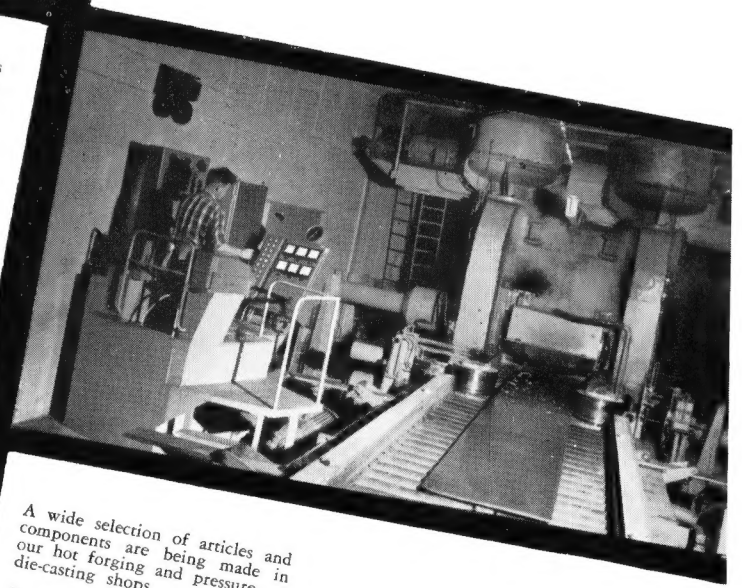
The beautiful surroundings of Raufoss, with lakes and forests, provide excellent opportunities for hunting, fishing, camping and skiing, and ensure everyone of more beneficial recreation than is possible in large industrial areas, bringing strength and contentment which again is reflected in increased effort on the job.

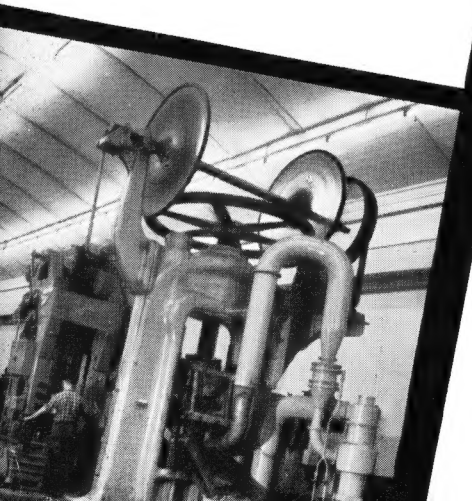
To the right:
The automatic machinery workshops have equipment comprising automatic and semiautomatic machines, turret lathes, drilling and milling machines etc., in short, everything needed for modern mass production of ammunition as well as numerous civilian products.

To the left:
A modern high capacity extrusion press for rods, bars, tubes, profiles, shapes and wire in aluminium, brass, copper etc. with auxiliary machines for cold drawing to meet required specifications.

New hot and cold rolling mills for sheets, strips and blanks have been acquired a few years ago. Alloys are mixed and slabs and billets for rolling mills and presses are cast in our own metal foundry after having been carefully analyzed and tested in our laboratories.

To the right: The hot rolling mill



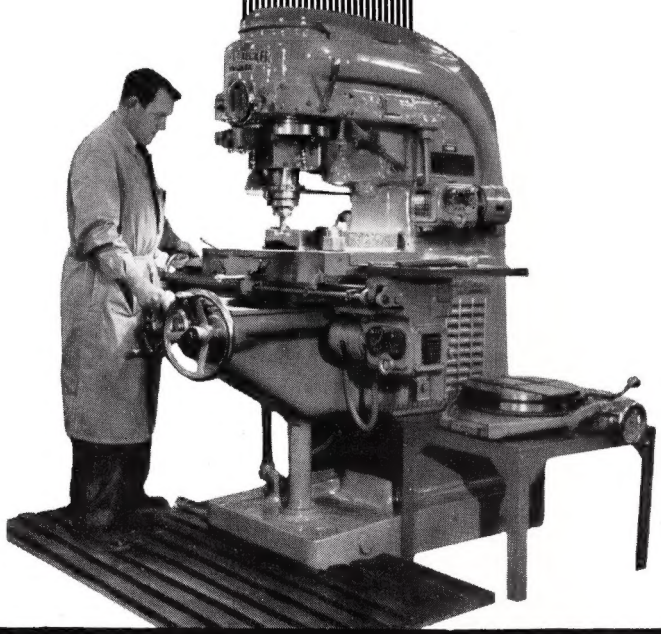


A wide selection of articles and components are being made in our hot forging and pressure die-casting shops.

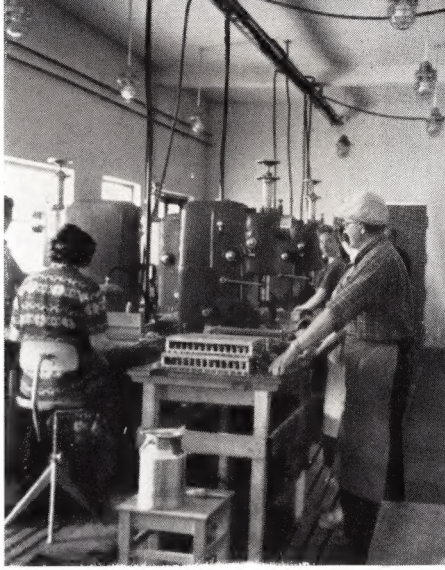
To the left: A line of machines for hot forging.

The drawing board represents a vital stage in the development of most products. A staff of more than 20 engineers and designers with their assistants is at disposal for new commissions. All tools used in our production are designed by our own people.

In our well equipped tool department, the designs are transformed into tools and production utensils by experts who can draw on the experience of generations.



Gun cartridge cases shop



From the pyrotechnical department

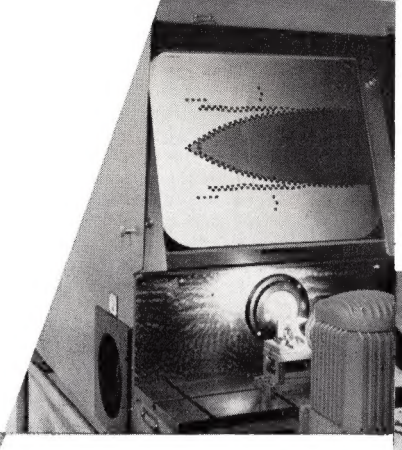
The bullet jacket manufacturing shop

This new building houses the chemical, physical and metallurgical test laboratories,

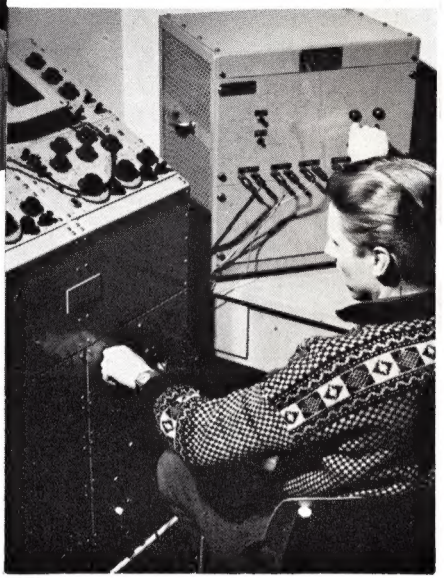
The National Test Agency (Norwegian Ordnance Corps) is also located in this building

Control is vital

in the process of making ammunition, and the most up to date methods, as in-process statistical quality control, are now in use.



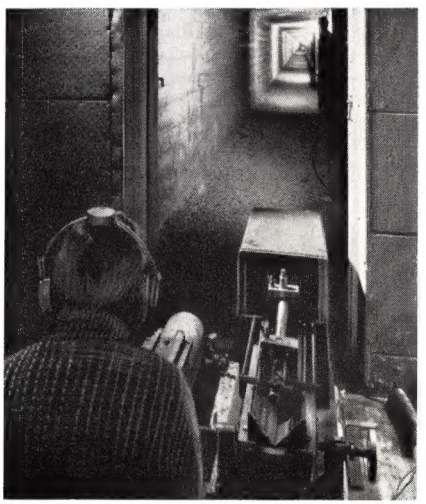
Hillger — projector for profile control (here: Cal. 50 AP core).



Hang-fire recorder for Small Arms ammunition (Oscillograph).

Brinell hardness and micro test apparatus.

Proving ground for artillery ammunition.



Accuracy firing bay.

INDEX TO PRODUCTION PROGRAM

ammunition

For Pistols	7.65 - 9 mm - Cal. .45/11.25 mm
For Rifles and Carbines	6.5 - 7.62 mm Match - cal. .30 Carb.
For Rifles and Machine Guns	Cal. .30.06
	7.62 mm - NATO
	Cal. .303
For Machine Guns	Cal. .50
For Training Purposes	Cal. .30.06 Blank - cal. .50 Blank
Hand Grenades	Hand grenades
For Mortars	60 mm U.S. & Tampella
	81 mm U.S. & Tampella
	120 mm Tampella
	PD-Fuze SP-M58 (Tampella)
For Guns	40 mm L/60
	40 mm L/70
	Misc Art. Ammo.

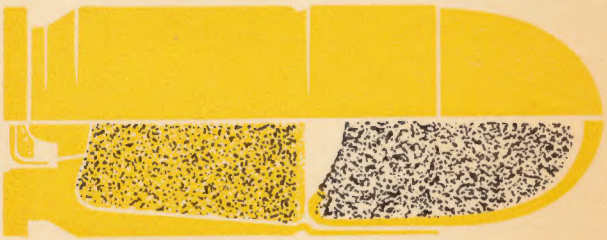
Pistol ammunition

A

7.65 mm
Ball

9 mm Parabellum
Ball M59

Cal. 45 - 11.25 mm
Ball M1911



RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	PISTOLS Packaging	PISTOLEN Verpackung
A11	74	93	0.71	5000	**7.65 mm:** 50/ctn, 100 /ctn/wdn box	**7.65 mm:** 50/Pappsch 100 Pappsch/Holzkiste
A12	66	98	0.92	2500	**9 mm:** 50/ctn, 50 ctn/mtl-lnd wdn box	**9 mm:** 50/Pappsch, 50/Pappsch/ Holzkiste mit Zinkfütterung
A13	42	55	0.76	1600	16/ctn, 50 ctn/mtl can M20, 2 mtl.cans/wdn box M22	16/pappsch., 50 Pappsch/ Blechk, 2 Blechk/Holzkiste
A14	84	110	0.92	2000	**Cal. .45** 20/ctn. 100 ctn/mtl-lnd wdn box	**11/25 mm:** 20/Pappsch 100 Pappsch/Holzkiste mit Zinkfütterung
A15	84	109	0.92	2000	50/ctn, 40 ctn/mtl-lnd wdn box	50/Pappsch, 40 Pappsch/Holzkiste mit Zinkfütterung
A16	50	68	0.76	1200	50/ctn, 12 ctn/can M20 2 cans/wdn box M22	50/Pappsch 12 Pappsch/Blechk, 2 Blechk/Holzkiste
					Other types of packaging to be quoted on request	**Andere Typen von Verpackungen werden auf Wunsch angeboten**

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE, 9 mm - PATRONE 9 mm

BALL M 59 (Parabellum)

PERFORMANCE LEISTUNG	Velocity V 60 ft Geschw.keit V 18.5m	1300 ft./sec	396 m/sek
	Chamber pressure Gasdruck	42000 lbs./□"	2940 kg/cm²
	Range Schussweite	2200 yds.	2000 m
	Accuracy 50 yds. Treffsicherh. 45 m	Mean figure of merit 3" (max)	H + B max 15 cm
	Penetration Durchschlag	7/8" of pine boards	22 mm föhrende Planken
PROJECTILE GESCHOSS	Type	Ball MK 2	Vollmantelgeschoss MK 2
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Lead Antimony	Blei-Antimon
	Fillings Füllung	None	Keine
	Weight Gewicht	115 grains	7.49 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless,	Randlos,
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight Gewicht	61 grains	3.95 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost-und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC - Powder, smokeless, flashless, non-hygroscopic	NC-Pulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	5,5 grains approx	Etwa 0.36 g
TOTAL WEIGHT TOTALGEWICHT		182 grains approx	Etwa 11.8 g

ADAPTED FOR:
GEEIGNET FÜR:

9 mm, Luger, M 08	(Germany)	9 mm, Schmeisser, M 40	(Germany)
9 mm, Walter, P 38	(Germany)	9 mm, Sten. MK2	(U. K.)
9 mm, Husquarna,	(Sweden)	9 mm, Lathi	(Suomi)
9 mm. Browning,	(Belgium)	9 mm, M 3,	(U. S.)
9 mm, Radom	(Poland)	9 mm, Lancaster,	(U. K.)
cal. 38, Automatic,	(U. S.)	9 mm, Beretta M 38	(Italy)
		9 mm, Sterling MP	(U.K.)

CARTRIDGE CAL. .45 - PATRONE 11.25 mm

Ball M 1911

PERFORMANCE LEISTUNG	Velocity V 60 ft. Geschw.keit V 23,8m	850 ft./sec. (5" barrel) 920 ft./sec. (10½" barrel)	260 m/sek. (127 mm Lauf) 280 m/sek. (267 mm Lauf)
	Chamber pressure Gasdruck	23100 lbs /□" (max)	1617 kg/cm²
	Range Schussweite	1760 yds.	1600 m
	Accuracy 50 yds. Treffsicherh. 45 m	Mean radius 1,36" (max)	Mittelradius 34,54 mm
	Penetration 50 yds. Durchschlag 45 m.	5/8" of pine boards	16 mm föhrene Planken
PROJECTILE GESCHOSS	Type	Ball M 1911	Vollmantelgeshoss M 1911
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Lead-Antimony	Blei-Antimon
	Fillings Füllung	None	Keine
	Weight Gewicht	200 grains	12.9 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	85 grains	5.5 g
PRIMER ZÜNDUNG	Type	Berdan, non corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC or NGL (double-base) smokeless, flashless, non-hygroscopic	NC oder NGL (progressiv) rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	6 grains approx	etwa 0.4 g
TOTAL WEIGHT TOTALGEWICHT		291 grains approx	etwa 18.9 g

ADAPTED FOR:
GEEIGNET FÜR:

Pistol, Automatic cal. 45, M 1911 A1 (U S)
Pistol, Colt, 11,25 mm, M 1914 (Norway)
Revolver, Colt, cal. 45, M 1917 (U S.)
Revolver, Smith & Wesson, cal. 45, M 3 (U.S.)
Submachine Gun, cal. 45 M 1 & M 1 A 1 (U.S.)
Submachine Gun, cal. 45, M 1928 A 1 (U S.)

Rifle and Carbine ammunition

B

6.5 mm Match
Ball Mod. D

7.62 mm Match
Ball

Cal. 30 Carbine
Ball M1

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

MATCH 6.5 mm PRÄZISION

Ball Mod. D (6.5 x 55)

PERFORMANCE LEISTUNG	Velocity V 82 ft Geschw.keit V 25 m	2395 ft/sec	730 m/sek
	Chamber pressure Gasdruck	45500 lbs/□" (max)	3200 kg/cm² (max)
	Range, Schussweite	4600 yds	4200 m
PROJECTILE GESCHOSS	Type	Ball Mod. D (Boat-tailed)	Vollmantelgeschoss Mod. D (mit konisch verjüngtem Hinterteil)
	Jacket Mantel	Gilding Metal	Tombak
	Core Kern	Lead-Antimony	Blei-Antimon
	Weight/Gewicht	138.4 grains	9 g
CARTRIDGE CASE PATRONENHÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	184.6 grains	12 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-errosive	Berdan, rost- und erosionssicher
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	Double Base or NC progr. singleperforated, smokeless, flashless, non-hygroscopic	Ngl. oder NC progr. rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight/Gewicht	33.8 grains approx	etwa 2.2 g
TOTAL WEIGHT TOTALGEWICHT		361.5 grains approx	etwa 23.5 g

ADAPTED FOR:

GEEIGNET FÜR:

Rifles:	Krag-Joergensen, M94 (Norway) Mauser M37 & M40 (Sweden) Automatic M42 (Sweden)
Carabine:	Krag-Joergensen M29 (Norway)
Maschine guns:	Madsen M1914 & M1922 (Denmark) M14, M14-29 & M39 (Sweden) Tank, M39 & M42 (Sweden)

MATCH 7.62 mm PRÄZISION

Ball (7.62 x 63)

PERFORMANCE LEISTUNG	Velocity V 82 ft. Geschw.keit V 25 m	2625 ft/sec	800 m sek
	Chamber pressure Gasdruck	42700 lbs/□" (max)	3000 kg/cm² (max)
	Range Schussweite	3500 yds	3200 m
PROJECTILE GESCHOSS	Type	Ball	Vollmantelgeschoss
	Jacket Mantel	Gilding Metal Clad Steel	Tombakkplattierter Stahl
	Core Kern	Lead-Antimony	Blei-Antimon
	Weight/Gewicht	153.3 grains	9.9 g
CARTRIDGE CASE PATRONENHÜLSE	Type	Rimless	Randlos
	Material	Brass (Cn/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	200 grains	13 g
PRIMER ZÜNDUNG	Type	Berdan, non corrosive non erosive	Berdan, rost- und erossionssicher
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, single perforated smokeless, flashless, non-hygroscopic	NC, Röhrenpulver rauchlos, mündungsfeuer-frei, nicht hygrosckopisch
	Weight/Gewicht	400 grains approx	etwa 3,2 g
TOTAL WEIGHT TOTALGEWICHT		49.5 grains approx	etwa 26 g

ADAPTED FOR:

GEEIGNET FÜR:

U.S. RIFLE:
Cal 30, M 1903 (Spr.f.) A1, A3, A4
Cal. 30, M 1917
Cal. 30, M 1 (Garand)

BROWNING AUT. RIFLE:
Cal. 30 M 1918 A2 (BAR)

BROWNING MACHINE GUNS:
Cal. 30 M 1917 A1 (watercooled)
Cal. 30 M 1919 A4 (H.B.)
Cal. 30 M 1919 A5
Cal. 30 M 1919 A6
Cal. 30 M 2 (Aircraft)

CARTR. CAL. .30 - CARBINE - PATR. 7.62 mm

Ball M1

PERFORMANCE LEISTUNG	Velocity V 53 ft. Geschw.keit V 16 m	1900 ft/sec	575 m/sek
	Chamber pressure Gasdruck	40 000 lbs/□" (max)	2822 kg/cm² (max)
	Range Schussweite	2200 yds	2000 m
	Accuracy 100 yds Treffsicherh. 91 m	Mean radius $1^1/_2$" (max)	Mittelradius 38 mm (max)
PROJECTILE GESCHOSS	Type	Ball M1	Vollmantelgeschoss M1
	Jacket Mantel	Gilding Metal	Tombak
	Core Kern	Lead-Antimony	Blei-Antimon
	Filling/Füllung	None	Keine
	Weight/Gewicht	111 grains	7.19 g
CARTRIDGE CASE PATRONENHÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight/Gewicht	71 grains	4.6 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive, non-erosive	Berdan, rost und errosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	Double Base, Ball Powder smokeless, flashless, non-hygroscopic	NGL, Kugelpulver rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight/Gewicht	13 grains approx	etwa, 0.84 g
TOTAL WEIGHT TOTALGEWICHT		193 grains approx	etwa 12.5 g

ADAPTED FOR:

GEEIGNET FÜR:

Cal. 30 Carabine M1
Cal. 30 Carabine M1 A1
Cal. 30 Carabine M2
Cal. 30 Carabine M3

CARTR. CAL. .30 - CARBINE - PATR. 7.62 mm

Tracer M27

PERFORMANCE LEISTUNG	Velocity V 53 ft. Geschw.keit V 16 m	1850 ft/sec	562 m/sek
	Chamber pressure Gasdruck	40 000 lbs/□" (max)	2822 kg/cm² (max)
	Range/Schussweite	1680 yds	1535 m
	Tracer/Leuchtspur	500 yds	457 m
	Accuracy 100 yds Treffsicherh. 91 m	Mean radius 4" (max)	Mittelradius 102 mm (max)
PROJECTILE GESCHOSS	Type	Tracer M 27	Leuchtspur M 27
	Jacket Mantel	Gilding Metal Clad Steel	Tombakplattierter Stahl
	Core Kern	Lead-Antimony	Blei-Antimon
	Filling/Füllung	Base: Tracer and Ign.Comp.	Boden: Leuchtspursatz
	Weight/Gewicht	107 grains	6.93 g
CARTRIDGE CASE PATRONENHÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	71 grains	4.6 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive, non-erosive	Berdan, rost- und errosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	Double Base, Ball Powder smokeless, flashless, non-hygroscopic	NGL, Kugelpulver rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	13 grains approx	etwa 0.84 g
TOTAL WEIGTH TOTALGEWICHT		187 grains approx	etwa 12.2 g

ADAPTED FOR:

GEEIGNET FÜR:

Cal. 30 Carabine M1
Cal. 30 Carabine M1 A1
Cal. 30 Carabine M2
Cal. 30 Carabine M3

RIFLES AND CARBINES - GEWEHRE UND KARABINER

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackungen
B11	52	62	0.88	1000	**6.5 mm:** 20/ctn, 50 ctn/wdn box	**6.5 mm:** 20/Pappsch, 50 Pappsch/Holzkiste
B12	57	66	0.99	1000	**7.62 mm:** 20/ctn, 50 ctn/wdn bx	**7.62 mm:** 20/Pappsch, 50 Pappsch/Holzkiste
B13	55	63	0.51	2000	**Cal. 30 Carbine:** 50/ctn, 40 ctn/mtl-lnd wdn box	**7.62 mm US Karabiner** 50/Pappsch, 40 Pappsch/Holzkiste mit Zinkfütterung
B14	83	100	0.90	3000	50/ctn, 60/ctn/mtl-lnd wdn box	50/Pappsch 60 Pappschl/Holzkiste mit Zinkfütterung
B15	33	51	0.76	1200	10/clips, 12 clips/band, 5 band/can M20 2 can M20/wdn box	10/Lader, 12 Lader./Band 5 Band/Blechk, 2 Blechk/Holzkiste
B16	59	87	0.90	2160	10/clips 12 clips/band 9 band/mtl box M2 A1 2 mtl box/wdn box	10/Lader, 12 Lader/Band 9 Band/Stahlk, 2 Stahlk/Holzkiste

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

Cartridge cal. 30.06 - Patr. 7.62 mm

Ball M2

Tracer M25

Armour Piercing M2

Armour Piercing
Incendiary M14A1

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE CAL. .30.06 - PATRONE 7.62 mm

BALL M 2

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23.8 m	2740 ft./sec	835,10 m/sek
	Chamber pressure Gasdruck	52000 lbs./□" (max)	3756 kg/cm² (max)
	Range Schussweite	3500 yds.	3200 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius $7^1/_2$" (max)	Mittelradius 190 mm
	Penetration 200 yds. Eindringen 180 m	Min 0.3" in 7/8" thick homogeneous armour plate	Min 7,62 mm in 22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	Ball M 2	Vollmantelgeschoss M 2
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Lead-Antimony	Blei-Antimon
	Fillings Füllung	None	Keine
	Weight Gewicht	152 grains	9,85 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	200 grains	12.96 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated, smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	50 grains approx	Etwa 3,3 g
TOTAL WEIGHT TOTALGEWICHT		402 grains approx	Etwa 26 g

ADAPTED FOR:

GEEIGNET FÜR:

U.S. RIFLE:
Cal. 30. M 1903 (Spr.f.) A1, A3. A4
Cal. 30, M 1917
Cal. 30, M 1 (Garand)

BROWNING AUT. RIFLE:
Cal. 30 M. 1918 A2 (BAR)

BROWNING MACHINE GUNS:
Cal. 30 M 1917 A1 (watercooled)
Cal. 30 M 1919 A4 (H.B.)
Cal. 30 M 1919 A5
Cal. 30 M 1919 A6
Cal 30 M 2 (Aircraft)

CARTRIDGE CAL. .30.06 - PATRONE 7.62 mm

Tracer M 25

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23.8 m	2655 ft./sek.	809.8 m/sek. (max)
	Chamber pressure Gasdruck	52000 lbs./□" (max)	3656 kg/cm
	Range Schussweite	3200 yds	2925 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 18" max	Mittelradius 447 mm
	Trace Leuchtspur	Dim. to 75 yds. Bright to 900 yds.	Glimm 70 m Klar 800 m
PROJECTILE GESCHOSS	Type	Tracer M 25 (TR M 25)	Leuchtspur M 25
	Jacket Mantel	Clad steel	Tombakplattierter Stahl
	Core Kern	Lead-Antimony	Blei-Antimon
	Fillings Füllung	Tracer and Igniter Comp.	Leuchtsp. u. Übertr.ladung
	Weight Gewicht	145 grains	9.40 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	200 grains	12.9 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	50 grains approx	Etwa 3.24 g
TOTAL WEIGHT TOTALGEWICHT		395 grains approx	Etwa 25.60 g

ADAPTED FOR:
GEEIGNET FÜR:

U.S. RIFLE:
Cal. 30. M 1903 (Spr.f.) A1, A3. A4
Cal. 30, M 1917
Cal. 30, M 1 (Garand)

BROWNING AUT. RIFLE:
Cal. 30 M. 1918 A2 (BAR)

BROWNING MACHINE GUNS:
Cal. 30 M 1917 A1 (watercooled)
Cal. 30 M 1919 A4 (H.B.)
Cal. 30 M 1919 A5
Cal. 30 M 1919 A6
Cal. 30 M 2 (Aircraft)

CARTRIDGE CAL. .30.06 - PATRONE 7.62 mm

Armour Piercing M 2

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8 m	2715 ft./sec.	828 m/sek.
	Chamber pressure Gasdruck	54000 lbs./□" (max)	3797 kg/cm² (max)
	Range Schussweite	3160 yds.	2888 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 10"	Mittelradius 254 mm
	Penetration 200 yds. Eindringen 180 m	Min. 0.42" in 7/8" thick homogeneous armour plate	Min. 10,67 mm in 22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	Armour Piercing M 2	Panzerpatrone M 2
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Hardened Steel	Gehärteter Stahl
	Fillings Füllung	Lead point and base	Kopf und Boden: Blei
	Weight Gewicht	168 grains	10.9 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	200 grains	12.9 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	50 grains approx	Etwa 3.3 g
TOTAL WEIGHT TOTALGEWICHT		418 grains approx	Etwa 26 g

ADAPTED FOR:
GEEIGNET FÜR:

U.S. RIFLE:
Cal. 30. M 1903 (Spr.f.) A1, A3. A4
Cal. 30, M 1917
Cal. 30, M 1 (Garand)

BROWNING AUT. RIFLE:
Cal. 30 M. 1918 A2 (BAR)

BROWNING MACHINE GUNS:
Cal. 30 M 1917 A1 (watercooled)
Cal. 30 M 1919 A4 (H.B.)
Cal. 30 M 1919 A5
Cal. 30 M 1919 A6
Cal. 30 M 2 (Aircraft)

CARTRIDGE CAL. .30.06 - PATRONE 7.62 mm

Armour Piercing Incendiary M 14 A1

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23.8 m	2780 ft./sec.	848 m/sek.
	Chamber pressure Gasdruck	54000 lbs /□" (max)	3797 kg/cm²
	Range Schussweite	3300 yds.	3016 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 15" (max)	Mittelradius 380 mm
	Penetration 200 yds. Eindringen 180 m	Min. 0.35" in 7/8" thick homogeneous armour plate	Min 8.89 mm in 22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	API M14 A1	Panzerbrandpatr. M14 A1
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Hardened Steel	Gehärteter Stahl
	Fillings Füllung	Incendiary Comp. (Point)	Brandsatz (Spitze)
	Weight Gewicht	150 grains	9.72 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	200 grains	12.9 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	50 grains approx	Etwa 3.3 g
TOTAL WEIGHT TOTALGEWICHT		402 grains approx	Etwa 26.7 g

ADAPTED FOR:
GEEIGNET FÜR:

U.S. RIFLE:
Cal. 30. M 1903 (Spr.f.) A1, A3. A4
Cal. 30, M 1917
Cal. 30, M 1 (Garand)

BROWNING AUT. RIFLE:
Cal. 30 M. 1918 A2 (BAR)

BROWNING MACHINE GUNS:
Cal. 30 M 1917 A1 (watercooled)
Cal. 30 M 1919 A4 (H.B.)
Cal. 30 M 1919 A5
Cal. 30 M 1919 A6
Cal. 30 M 2 (Aircraft)

CARTRIDGE CAL. 30.06 - PATRONE 7.62 mm

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackungen
C1	85	110	1.49	1500	20/ctn 75 ctn/mtl-lnd wdn box	20/Pappsch 75 Pappsch/Holzkiste mit Zinkfütterung
C2	85	113	1.49	1500	Linked: 250/belt 6 belt/mtl-lnd wdn box	Gegürted: 250/Gurt 6 Gurt/Holzkiste mit Zinkfütterung
C3	86	113	1.49	1500	Linked : 100/belt 15 belt/mtl-lnd wdn box	Gegürted: 100/Gurt 15 Gurt/Holzkiste mit Zinkfütterungen
C4	77	111	1.49	1344	8/clip 6 clip/band 28 band/mtl-lnd wdn box	8/Lader 6 Lader/Band 28 Band/Holzkiste mit Zinkfütterung
C5	57	72	0.99	1000	20/ctn 50 ctn/mtl-lnd wdn box	20/Pappsch 50 Pappsch/Holzkiste mit Zinkfütterung
C6	57	86	0.93	1000	Linked: 250/belt 1 belt/mtl box 4 mtl box/wdn box	Gegürted: 250/Gurt 1 Gurt/Stahlkiste (w.dicht) 4 Stahlk/Holzkiste
C7	22	40	0.76	384	8/clip 6 clip/band 4 band/can 2 can/wdn box	8/Lader 6 Lader/Band 4 Band/Blechk 2 Blechk/Holzkiste
C8	85	116	1,49	1500	5/clip 4 clip/ctn 75 ctn/mtl-lnd wdn box	5/Lader 4 Lader/Pappsch 75 Pappsch/Holzkisten mit Zinkfütterung

All weights refer to Ball amm.
Alle Gewichten betreff. Vollgeschoss

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Cartr. Cal. 30.08 - NATO - 7.62 mm

Ball M59

Tracer M25

Armour Piercing M61

D

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE - 7.62 mm NATO - PATRONE

Ball M59

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8m	2757 ft/sec	838 m/sek
	Chamber pressure Gasdruck	48 455 lbs/□" (max)	3500 kg/cm² (max)
	Range Schussweite	3500 yds	3200 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius $7^1/_2$" (max)	Mittelradius 190 mm (max)
PROJECTILE GESCHOSS	Type	Ball M59	Vollmantelgeschoss M59
	Jacket/Mantel	Gilding metal	Tombak
	Core/Kern	Lead-Antimony	Blei-Antimon
	Filling/Füllung	None	Keine
	Weight/Gewicht	143 grains	9,3 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	185 grains	12 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, single-perforated, smokeless, flashless, non-hygroscopic	NC, Röhrenpulver, rauchlos, münd.feuerfrei nicht hygroskopisch
	Weight/Gewicht	43 grains	2,8 g
TOTAL WEIGHT TOTALGEWICHT		373 grains approx	etwa 24,3 g

ADAPTED FOR:

GEEIGNET FÜR:

Rifles:	Machine guns:
7.62 mm FN	7.62 mm M52
7.62 mm FN (C1)	7.62 mm M60
7.62 mm L1A1	7.62 mm M42
	7.62 mm M1919A4 Mod.

CARTRIDGE - 7.62 mm NATO - PATRONE

Tracer M25

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8m	2750 ft/sec	836 m/sek
	Chamber pressure Gasdruck	48 455 lbs/□" (max)	3500 kg/cm² (max)
	Range Schussweite	3200 yds	2925 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 12" (max)	Mittelradius 305 mm (max)
	Tracer Leuchtspur	900 yds	800 m
PROJECTILE GESCHOSS	Type	Tracer M25	Leuchtspur M25
	Jacket/Mantel	Gilding Metal Clad Steel	Tombakplattierter Stahl
	Core/Kern	Lead-Antimony	Blei-Antimon
	Filling/Füllung	Tracer and Igniter Comp.	Leuchtsp. u. Übertr.ladung
	Weight/Gewicht	146 grains	9.5 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	185 grains	12 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, single-perforated, smokeless, flashless, non-hogroscopic	NC, Röhrenpulver, rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	43 grains	2,8 g
TOTAL WEIGHT TOTALGEWICHT		376 grains	etwa 24,5 g

ADAPTED FOR:

GEEIGNET FÜR:

Rifles:	Machine guns:
7.62 mm FN	7.62 mm M52
7.62 mm FN (C1)	7.62 mm M60
7.62 mm L1A1	7.62 mm M42
	7.62 mm M1919A4 Mod.

CARTRIGDE - 7.62 mm NATO - PATRONE

Armour Piercing M61

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8m	2750 ft/sec	836 m/sek
	Chamber pressure Gasdruck	48 455 lbs/□" (max)	3500 kg/cm² (max)
	Range Schussweite	3160 yds	2890 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius $7^1/_2$" (max)	Mittelradius 190 mm (max)
	Penetration 100 yds Eindringen 90 m	Min. 0.38" in $^7/_8$" thick homogeneous armour plate	Min. 9.65 mm in 22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	Armour Piercing M61	Panzerpatrone M61
	Jacket/Mantel	Gilding metal	Tombak
	Core/Kern	Hardened steel	Gehärteter Stahl
	Filling/Füllung	Lead point and base	Kopt und Boden: Blei
	Weight/Gewicht	150 grains	9.75 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight/Gewicht	185 grains	12 g
PRIMER ZÜNDUNG	Type	Berdan, non-corrosive non-erosive	Berdan, rost- und erosionsfrei
	Priming mixture Zündsatz	Sinoxid	Sinoxid
PROPELLANT TREIBLADUNG	Type	NC, single-perforated, smokeless, flashless, non-hygroscopic	NC, Röhrenpulver, rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	43 grains	2,8 g
TOTAL WEIGHT TOTALGEWICHT		380 grains approx	etwa 24,75 g

ADAPTED FOR:

GEEIGNET FÜR:

Rifles:	Machine guns:
7.62 mm FN	7.62 mm M52
7.62 mm FN (C1)	7.62 mm M60
7.62 mm L1A1	7.62 mm M42
	7.62 mm M1919A4 Mod.

CARTRIDGE - 7.62 mm NATO - PATRONE

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs.)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
D11	81	104	1.35	1500	20 ctge/ctn 75 ctn/mtl-lnd wdn box	20 Patr/Pappsch 75 Pappsch/Holzkiste mit Zinkfütterung
D12	162	200	2.7	3000	20 ctge/ctn 150 ctn/mtl-lnd wdn box	20 Patr/Pappsch 150 Pappsch/Holzkiste mit Zinkfütterung

All weights refer to Ball amm.
Alle Gewichten betreff. Vollgeschoss

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Rifle ammunition

Cal. 303
Ball

Tracer

7.92 mm
Ball

Tracer

E

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Cartridge cal. .50 - Patr. 12.7 mm

Ball M33

Tracer M17

Armour Piercing M2

Armour Piercing Incendiary M8

Armour Piercing Incendiary Tracer M20

F

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE CAL. .50 - PATRONE 12,7 mm

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
F11	88.50	112	1.49	350	10/ctn. 35 ctn/mtl-lnd wdn box	10/Pappsch 35 Pappsch/Holzkiste mit Zinkfütterung
F12	75.87	90	1.10	300	10/ctn. 30 ctn/mtl-lnd wdn box	10/Pappsch 30 Pappsch/Holzkiste mit Zinkfütterung
F13	60.70	82	1.28	240	10/ctn 12 ctn/can 2 can/wdn box	10/Pappsch 12 Pappsch/Blechkisten 2 Blechk/Holzkiste
F14	50.58	75	0.90	200	Linked: 100/belt 1 belt/mtl box 2 mtl box/wdn box	Gegürtet: 100/Gurt 1 Gurt/Stahlkiste (w.dicht) 2 Stahlk/Holzkiste
F15	50.58	64	1.28	200	Linked: 50/belt 4 belt/wdn box	Gegürtet: 100/Gurt 4 Gurt/Holzkiste
F16	30.35	44	0.65	120	10/ctn 6 ctn/can 2 can/wdn box	10/Pappsch 6 Pappsch/Blechk 1 Blechk/Holzkiste

All weights refer to Ball amm.
Alle Gewichten betreff. Vollgeschoss

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE CAL. .50 - PATRONE 12.7 mm

BALL M 33

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23.8 m	2910 ft/sec. (36" barrel)	888 m/sek (91.4 cm Lauf)
	Chamber pressure Gasdruck	55.000 lbs./□" (max)	3850 kg/cm² (max)
	Range Schussweite	7400 yds	6750 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 12"	Mittelradius 305 mm
	Penetration 200 yds. Eindringen 180 m	Min 1/2" in 7/8" thick homogeneous armour plate	Min 12.7 mm in 22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	Ball M 33 (Boat-tailed)	Vollmantelgeschoss M 33 (Konisch verjüngter Hintert)
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Steel	Stahl
	Fillings Füllung	Point: Natrium Carbonate Natrium Sulphate, Borax	Spitze: Natrium Carbonat Natrium Sulphat, Borax
	Weight Gewicht	Base: Lead-Antimony 650 grains	Boden: Blei-Antimon 42 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	850 grains	55.1 g
PRIMER ZÜNDUNG	Type	Fuze-type (anvil-primer) non-corrosive, non-erosive	Amboss-Zundhütchen, rost-und erosionsfrei
	Priming mixture Zündsatz		
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated, smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	230 grains approx	Etwa 15 g
TOTAL WEIGHT TOTALGEWICHT		1770 grains approx	Etwa 115 g

ADAPTED FOR:
GEEIGNET FÜR:

Machine Gun cal 50 Browning, M 2, Aircraft
» » » 50 » M 2, HB
» » » 50 » M 3, Aircraft
» » » 50 » Water-cooled

CARTRIDGE CAL. .50 - PATRONE 12.7 mm

Tracer M 17

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8 m	2860 ft./sek.	872 m/sek.
	Chamber pressure Gasdruck	54000 lbs./□" (max)	3800 kg/cm²
	Range Schussweite	5400 yds	4950 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 20 in. (max)	Mittelrad. 504 mm (max)
	Penetr./Durchschl. Trace/Leuchtsp.	1600 yds (min.)	1460 m (min.)
PROJECTILE GESCHOSS	Type	Tracer M 17	Leuchtspur M 17
	Jacket Mantel	Guilding Metal Clad Steel	Tombakplattierter Stahl
	Core Kern	Lead-Antimony	Blei-Antimon
	Fillings Füllung	Base: Tracer Composition	Boden: Leutspursatz
	Weight Gewicht	640 grains	41.5 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	850 grains	55.1 g
PRIMER ZÜNDUNG	Type	Fuze-type (anvil-primer) non-corrosive, non-erosive	Amboss-Zündhütchen, rost- und erosionsfrei
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	220 grains approx	etwa 14.3 g
TOTAL WEIGHT TOTALGEWICHT		1735 grains approx	etwa 112,4 g

ADAPTED FOR:
GEEIGNET FÜR:

Machine Gun cal 50 Browning, M 2, Aircraft
» » » 50 » M 2, HB
» » » 50 » M 3, Aircraft
» » » 50 » Water-cooled

CARTRIDGE CAL. .50 - PATRONE 12,7 mm

ARMOUR PIERCING M2

PERFORMANCE LEISTUNG	Velocity V 78 ft Geschw.keit V 23.8m	2810 ft/sec.	857 m/sek
	Chamber pressure Gasdruck	53.000 lbs/□" (max)	3726 kg/cm² (max)
	Range Schussweite	7400 yds	6760 m
	Accuracy 50 yds. Treffsicherh. 45 m	Mean radius 10" (max)	Mittel radius 254 mm (max)
	Penetration Durchschlag	7/8" homogeneous armour plate	22 mm homogener Panzerplatte
PROJECTILE GESCHOSS	Type	Armour Piercing M2 (Boat-tailed)	Panzerbrechend M2 (Konisch verjüngter Hintert.)
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Mang.-Molybd. Steel	Mangan - Molybdän - Stahl
	Fillings Füllung	Point: Lead Antimony Base: Lead Antimony	Kopf: Blei Antimon Boden: Blei Antimon
	Weight Gewicht	705 grains	45.7 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	850 grains	55.1 g
PRIMER ZÜNDUNG	Type	Fuze-type (anvil-primer) non-corrosive, non-erosive	Amboss-Zundhütchen, rost - und erosionsfrei
	Priming mixture Zündsatz		
PROPELLANT TREIBLADUNG	Type	NC, IMR, Single-perforated, smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	230 grains approx	Etwa 15 g
TOTAL WEIGHT TOTALGEWICHT		1810 grains approx	Etwa 117 g

ADAPTED FOR:
GEEIGNET FÜR:

Machine	Gun	cal	50	Browning,	M 2, Aircraft
»	»	»	50	»	M 2, HB
»	»	»	50	»	M 3, Aircraft
»	»	»	50	»	Water-cooled

CARTRIDGE CAL. .50 - PATRONE 12.7 mm

Armour Piercing Incendiary M 8

PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8 m	2910 ft./sec	888 m/sek
	Chamber pressure Gasdruck	55000 lbs./□"	3850 kg/cm²
	Range Schussweite	6400 yds.	5850 m
	Accuracy 600 yds. Treffsicherh. 550 m	Mean radius 12" (max)	Mittelradius 305 mm (max)
	Penetr./Durchschl.	7/8" of homog. arm. plate	22 mm homog. Panzerpl.
	Trace/Leuchtsp.		
PROJECTILE GESCHOSS	Type	Armour Piercing Incend. M8	Panzerbrechend-Brand M8
	Jacket Mantel	Guilding Metal	Tambakplattiert
	Core Kern	Manganese-Molybd. Steel	Mangan-Molybdän-Stahl
	Fillings Füllung	Point filler: Incend. Comp.	Spitze: Brandsatz
	Weight Gewicht	660 grains	42.7 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless,	Randlos,
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight Gewicht	850 grains	55.1 g
PRIMER ZÜNDUNG	Type	Fuze-type (anvil-primer) non-corrosive, non-erosive	Amboss-Zündhütchen, rost- und erosionsfrei
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated, smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver. rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	240 grains approx	etwa 15 5 g
TOTAL WEIGHT TOTALGEWICHT		1770 grains approx	etwa 115 g

ADAPTED FOR:
GEEIGNET FÜR:

Machine Gun cal 50 Browning, M 2, Aircraft
» » » 50 » M 2, HB
» » » 50 » M 3, Aircraft
» » » 50 » Water-cooled

CARTRIDGE CAL. .50 - PATRONE 12,7 mm

API-T ARMOUR PIERCING INCENDIARY-TRACER M20

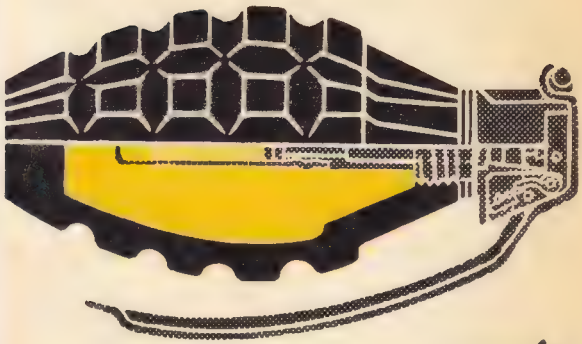
PERFORMANCE LEISTUNG	Velocity V 78 ft. Geschw.keit V 23,8m	2910 ft/sec.	888 m/sek
	Chamber pressure Gasdruck	55.000 lbs/□"	3867 kg/cm²
	Range Schussweite	6400 yds	5850 m
	Accuracy €00 yds. Treffsicherh. 550 m	Mean radius 12" (max)	Mittelrad. 304,8 mm (max)
	Penetr./Durchschl. Trace/Leuchtsp.	100 yds.: 7/8" armour plate 1600 yds. (min.)	90 m: 22 mm Panzerplatte 1460 m (min.)
PROJECTILE GESCHOSS	Type	Armour Piercing Incendiary-Tracer M 20 (API-T M 20)	Panzerbrechend-Brand-Leuchtspur M 20
	Jacket Mantel	Guilding Metal	Tombakplattiert
	Core Kern	Manganese-Molybd. Steel	Mangan-Molybdän-Stahl
	Fillings Füllung	Point: Incendiary Comp. Base: Tracer Comp.	Spitze: Brandsatz Boden: Leuchtspursatz
	Weight Gewicht	610 grains	39.5 g
CARTRIDGE CASE PATR.HÜLSE	Type	Rimless	Randlos
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weight Gewicht	850 grains	55.1 g
PRIMER ZÜNDUNG	Type	Fuze-type (anvil-primer) non-corrosive, non-erosive	Amboss-Zundhütchen, rost- und erosionsfrei
	Priming mixture Zündsatz		
PROPELLANT TREIBLADUNG	Type	NC, IMR, single-perforated, smokeless, flashless, non-hygroscopic	NC, IMR, Röhrenpulver, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight Gewicht	225 grains approx	etwa 14.6 g
TOTAL WEIGHT TOTALGEWICHT		1700 grains approx	etwa 115 g

ADAPTED FOR:
GEEIGNET FÜR:

Machine Gun cal. 50 Browning M 2, Aircraft
» » » 50 » M 2, HB
» » » 50 » M 3, Aircraft
» » » 50 » Water-cooled

Hand grenade - Handgranate

Fragmentation MK 2



Practice M21

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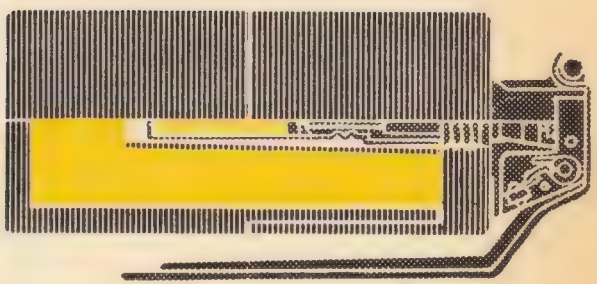
Offensive MK3A2



RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

HAND GRENADE HANDGRANATE

Fragmentation MK2

PERFORMANCE LEISTUNG	Range Wurfweite	30-50 yds when thrown	25 als 45 m wenn geworfen
	Range Schussweite	215 yds when fired	195 wenn geschossen
GRENADE BODY GRAN.KÖRPER	Type	Eggformed, fragmentation MK2	Eierförmig, Spr.hgr. Splitter DM11
	Material	Cast Iron	Grauguss
	Weight Gewicht	1.05 lbs.	477 g
	Filling Füllung	TNT	TNT (F.P. 02)
	Weight Gewicht	0.11 lbs	50 g
FUZE ZÜNDER	Type	M204 A2 Mouse-Trap mechanism Flying-off handle	M204 A2 Mausefälle-Mechanismus Kipp-Hebel
	Delay mixture Verzögerungssatz	Smokeless, sparkless, noiseless (Zirc-Ni-Alloy)	Rauchlos, funkenfrei lautlos (Zirc-Ni-Leg.)
	Delay time Verzögerungszeit	4—5 sec	4 bis 5 Sek.
	Detonator Sprengkapsel	Lead-Acid/Lead Tricinate /PETN filled alu.tube	Bleiazid/Bleitricinat /NP-gefülltes Alu.-Kapsel
	Weight Gewicht	0.22 lbs	100 g
TOTAL WEIGHT GEWICHT		1.48 lbs approx	etwa 627 g

ADAPTED FOR:
GEEIGNET FÜR:

US-rifle cal. .30 M1
with projection adapter M1 A1
Mit Shiesspecherausrüstung M1 A1

HAND GRENADE HANDGRANATE

Offensive MK3A2

PERFORMANCE LEISTUNG	Range Wurfweite	30-50 yds	25 bis 45 m
GRENADE BODY GRAN.KÖRPER	Type	Offensive, MK3A2	Sprenghgr. DM21
	Material	Fiber	Pappe
	Weight Gewicht	0,2 lbs	90 g
	Filling Füllung	TNT	TNT (F.P.02)
	Weight Gewicht	0,43 lbs	195 g
FUZE ZÜNDER	Type	M206 A2 Mouse-Trap mechanism Flying-off handle	DM42 Mausefälle-Mechanismus Kipp-Hebel
	Delay mixture Verzögerungssatz	Smokeless, sparkless, noiseless (Zirc-Ni-Alloy)	Rauchlos, funkenfrei, lautlos, (Zirc-Ni-Leg)
	Delay time Verzögerungszeit	4—5 sec	4 bis 5 Sek.
	Detonator Sprengkapsel	Lead-Acid/Lead Tricinate /PETN filled alu.tube	Bleiazid/Bleitricinat /NP-gefülltes Alu.-Kapsel
	Weight Gewicht	0,15 lbs	70 g
TOTAL WEIGHT GEWICHT		0.61 lbs approx	etwa 280 g

ADAPTED FOR:
GEEIGNET FÜR:

US-rifle cal. .30 M1
with projection adapter M1 A1
Mit Shiesspecherausrüstung M1 A1

HAND GRENADE HANDGRANATE

Practice M21

PERFORMANCE LEISTUNG	Range Wurfweite	30-40 yds when thrown	25 bis 35 m wenn geworfen
	Range Schussweite	215 yds when fired	195 m wenn geschossen
GRENADE BODY GRAN.KÖRPER	Type	Eggformed w/cork-plugged hole, re-usable after firing	Eierförmig, mit Kork zugepropftem Bodenloch, können mehrmals gebraucht werden
	Material	Cast Iron	Grauguss
	Weight Gewicht	1.05 lbs	477 g
	Filling Füllung	Black Powder	Schwarzpulver
	Weight Gewicht	0.002 lbs	5 g
FUZE ZÜNDER	Type	M205 A2 Mouse-Trap mechanism Flying-off handle	M205 A2 Mausefälle-Mechanismus Kipp-Hebel
	Delay mixture Verzögerungssatz	Smokeless, sparkless, noiseless (Zirc-Ni-Alloy)	Rauchlos, funkenfrei, lautlos (Zirc-Ni-Leg.)
	Delay time Verzögerungszeit	4—5 sec	4 bis 5 Sek
	Detonator Sprengkapsel	Black Powder filled copper tube	Schwarzpulver-gefülltes Kupfer-Kapsel
	Weight Gewicht	0.22 lbs	100 g
TOTAL WEIGHT GEWICHT		1.3 lbs approx	etwa 590 g

ADAPTED FOR:
GEEIGNET FÜR:

US-rifle cal. .30 M1
with projection adapter M1 A1
Mit Shiesspecherausrüstung M1 A1

HAND GRENADE - HANDGRANATE

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
For Fragmentation and Practice						
H11	35	52.6	1.27	25	1/fbr cntr 25 fbr cntr/wdn box	1/Packhülse 25 Packhülsen/Holzkiste
For Offensive						
H12	15.8	33.0	1.07	20	1/fbr cntr 20 fbr cntr/wdn box	1/Packhülse 20 Packhülsen/Holzkiste
For Offensive						
H13*	28.5	54.2	1.37	50	50 grenades/wdn box and 25 Fuzes/cntr (airtight) 8 cntr/wdn box	50 Handgranate/Holzkiste u 25 Zünd/Pappsch (luftdicht) 8 Pappsch/Holzkiste
	32.78	56.9	2.74	200		

*** Separate packaging for grenade and fuze.**
Getränte Verpackung für Granate und Zünder.

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Shell for 60 mm Mortar - Wurfgr 60 mm

HE M49A2

Practice, M 50A2

HE Practice

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

SHELL FOR 60mm MORTAR - WURFGRANATE 60mm

HE, M49A2 w/fuze PD M52A2

PERFORMANGE LEISTUNG	Velocity Vo Geschwindigkeit Vo	518 ft/sec (charge 4)	158 m/sek (Ladung 4)
	Chamber pressure Gasdruck	6000 lbs/□" (charge 4)	4.22 kg/mm² (Ladung 4)
	Range Wurfweite	1980 yds (charge 4)	1800 m (Ladung 4)
SHELL GRANATE	Type	HE M49 A2	Spreng M49 A2
	Filling Füllung	TNT	TNT
	Weight/Gewicht	2.95 lbs	1.345 kg
FUZE ZÜNDER	Type	Point Detonating M52A2	Kopfzünder M52A2
	Weight/Gewicht	0.51 lbs	231.33 g
IGN. CARTRIDGE ZÜNDPATRONE	Type	M5A1 (Paper Tube)	M5A1 (Papprohr)
	Powder Pulver	Double Base M9	Ngl. M9
	Weight/Gewicht	14 grains	0.91 g
PRIMER ZÜNDUNG	Type	Percussion M32	Treibladungszünder M32
	Filling Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	7 grains	0.45 g
PROPELLANT TREIBLADUNG	Type	DB Sheet Increment M8, cellophan wrapped Charge M3A1 (4 incr.)	Ngl., Plättchenpulver M8, Zellophan-umgewickelt Ladung M3A1 (4 Teill.)
	Weight/Gewicht	0.05 lbs	22.67 g
TOTAL WEIGHT TOTALGEWICHT		2.95 lbs	1.345 kg

ADAPTED FOR:
GEEIGNET FÜR:

Mortar, 60 mm M2
Mortar, 60 mm M19

SHELL FOR 60mm MORTAR - WURFGRANATE 60mm

Practice, M50A2 w/fuze PD M52A2

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	518 ft/sec (charge 4)	158 m/sek (Ladung 4)
	Chamber pressure Gasdruck	6000 lbs/□" (charge 4)	4.22 kg/mm² (Ladung 4)
	Range Wurfweite	1980 yds (charge 4)	1800 m (Ladung 4)
SHELL GRANATE	Type	Practice, M50A2	Übungsgranate, M50A2
	Filling Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	2.95 lbs	1.345 kg
FUZE ZÜNDER	Type	Point Detonating M52A2	Kopfzünder M52A2
	Weight/Gewicht	0.51 lbs	231.33 g
IGN. CARTRIDGE ZÜNDPATRONE	Type	M5A1 (Paper Tube)	M5A1 (Papprohr)
	Powdeh Pulver	Double Base M9	Ngl. M9
	Weigth/Gewicht	14 grains	0.91 g
PRIMER ZÜNDUNG	Type	Percussion M32	Treibladungszünder M32
	Filling Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	7 grains	0.45 g
PROPELLANT TREIBLADUNG	Type	DB Sheet Increment M8, cellophan wrapped Charge M3A1 (4 incr.)	Ngl., Plättchenpulver M8, Zellophan-umgewickelt Ladung M3A1 (4 Teill.)
	Weight/Gewicht	0.05 lbs	22.67 g
TOTAL WEIGHT TOTALGEWICHT		2.95 lbs	1.345 kg

ADAPTED FOR:
GEEIGNET FÜR:

Mortar, 60 mm M2
Mortar, 60 mm M19

SHELL FOR 60/81mm MORTAR - WURFGR. 60/81mm

Ref.	Weight/Gewicht Netto (lbs)	Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
60 mm						
I 11	23.6	42	0.69	8	1/fbr cntr 8 cntr/mtl box	1/Packhülse 8 Packhülsen/Stahlkiste
I 12	29.5	49	0.91	10	1/fbr cntr 10 cntr/wdn box	1/Packhülse 10 Packhülsen/Holzkiste
I 13	56.05	89	1.83	19	1/fbr cntr 19 cntr/wdn box	1/Packhülsen 19 Packhülsen/Holzkiste
81 mm						
K11	28.16	50	1.04	4	1/fbr cntr 4 cntr/wdn box	1/Packhülse 4 Packhülsen/Holzkiste
K12	28.16	53	0.61	4	1/fbr cntr 4 cntr/mtl box	1/Packhülse 4 Packhülsen/Stahlkiste
K13	42.24	72.5	1.50	6	1/fbr cntr 6 cntr/wdn box	1/Packhülse 6 Packhülsen/Holzkiste

Other types of packaging to be quoted on request

Andere Typen von Verpackungen *werden auf Wunsch* angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Shell for 81 mm Mortar - Wurfgr. 81 mm

HE M43A1

Practice, M43A1

HE Practice

K

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

SHELL FOR 81 mm MORTAR - WURFGR. 81 mm

HE, M43 A1 w/fuze PD M52 A2

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	700 ft/sec (full charge)	213 m/sek (volle Landung)
	Chamber pressure Gasdruck	5200 lbs/□" (full charge)	3,66 kg/mm² (volle Lad.)
	Range Wurfweite	3290 yds (full charge)	3000 m (volle Ladung)
SHELL GRANATE	Type	HE, M43A1	Spreng, M43A1
	Filling/Füllung	TNT	TNT
	Weight/Gewicht	6,92 lbs (as fired)	3,14 kg (wenn abgesch.)
FUZE ZÜNDER	Type	Point Detonating M52A2	Kopfzünder M52A2
	Weight/Gewicht	0,51 lbs	231,3 g
IGN. CARTRIDGE ZÜNDPATRONE	Type	M8 (Paper Tube)	M8 (Papprohr)
	Powder/Pulver	Double Base, M9	Ngl. M9
	Weight/Gewicht	120 grains	7,8 g
PRIMER ZÜNDUNG	Type	Percussion M34	Treibladungszünder M34
	Filling/Füllung	Black Powder	Schwarzpulver
PROPELLANT TREIBLADUNG	Type	DB Sheet Increment M8 cellophane wrapped Charge M1A1 (6 incr.)	Ngl. Plättchenpulver M8 zellophan-umgewickelt. Ladung M1A1 (6 Teill.)
	Weight/Gewicht	0.10 lbs	45.4 g
TOTAL WEIGHT TOTALGEWICHT		7.10 lbs	3.20 kg

ADAPTED FOR:
GEEIGNET FÜR:

Mortar, 81 mm M21
81 mm M21
81 mm T72
81 mm M34

SHELL FOR 81 mm MORTAR - WURFGR. 81 mm

Practice, M43 A1 w/fuze PD M52 A2

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	700 ft/sec (full charge)	213 m/sek (volle Landung)
	Chamber pressure Gasdruck	5200 lbs/□" (full charge)	3,66 kg/mm² (volle Lad.)
	Range Wurfweite	3290 yds (full charge)	3000 m (volle Ladung)
SHELL GRANATE	Type	Practice, M43A1	Übungsgranate, M43A1
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	6.97 lbs (as fired)	3.16 kg (wenn gesch.)
FUZE ZÜNDER	Type	Point Detonating M52A2	Kopfzünder M52A2
	Weight/Gewicht	0,51 lbs	231,3 g
IGN. CARTRIDGE ZÜNDPATRONE	Type	M8 (Paper Tube)	M8 (Papprohr)
	Powder/Pulver	Double Base, M9	Ngl. M9
	Weight/Gewicht	120 grains	7,8 g
PRIMER ZÜNDUNG	Type	Percussion M34	Treibladungszünder M34
	Filling/Füllung	Black Powder	Schwarzpulver
PROPELLANT TREIBLADUNG	Type	DB Sheet Increment M8 cellophane wrapped Charge M1A1 (6 Incr.)	Ngl. Plättchenpulver M8 zellophan-umgewickelt. Ladung M1A1 (6 Teill.)
	Weight/Gewicht	0.10 lbs	45.4 g
TOTAL WEIGHT TOTALGEWICHT		7.10 lbs	3.20 kg

ADAPTED FOR:
GEEIGNET FÜR:

Mortar, 81 mm M21
81 mm M21
81 mm T72
81 mm M34

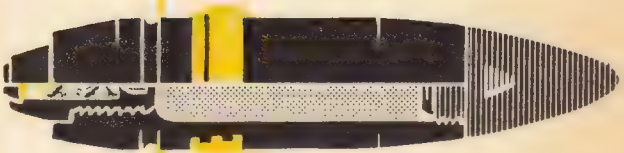
Cartridge - 40 mm L/60 - Patrone

HE-T, SD, MK2

HEI-T, SD, MK2

Armour Piercing
Ballistic Cap. Tracer
APBC-T, M81A1

Practice, T, SD, MK2



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RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE - 40 mm L/60 - PATRONE

Cartridge HE-T, SD. w/fuze PD MK 27

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	2890 ft./sek.	881 m/sek.
	Chamber pressure Gasdruck	42000 lbs./□"	2953 kg/cm²
	Range, ceiling Schussweite, Dach	5100 yds (limited by self destroying device)	4660 m (von Zerlegung begrenzt)
	Tracer burn.time L.spur Brennzeit	7-11 sec.	7-11 sek.
PROJECTILE GESCHOSS	Type	HE-T MK 2 (boat-tailed)	Sprenggranate L.spur MK2 Mod. 0 (mit konisch verjüngtem Hinterteil)
	Weight/Gewicht	1,39 lbs. (empty) 1,96 lbs. (as fired)	630 g (leer) 889 g (komplett)
	Filling/Füllung	TNT	TNT
FUZE ZÜNDER	Type	Super Quick, Point det. MK 27 Mod. 1	EKZ MK 27 Mod. 1
	Weight/Gewicht	0.2 lbs.	90.8 g
CARTRIDGE CASE PATRONENHÜLSE	Type	MK 2 Mod. 1 or M 25	MK 2 Mod. 1 oder M 25
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn - 70/30)
	Weight/Gewicht	1.7 lbs.	771 g
PRIMER ZÜNDUNG	Type	MK 22 Mod. 1 or M 38 A 1	MK 22 Mod. 1 oder M 38 A1
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	64 grains	4.15 g
PROPELLANT TREIBLADUNG	Type	NC, multiperforated, smokeless, flashless, non-hygroscopic	NC, siebenlöchig, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight/Gewicht	68 lbs. approx	Etwa 310 g
TRACER LEUCHTSPUR	Type	MK 11 Mod. 0 Tracer & SD. red trace	MK 11 Mod. 0 L.spur & Zerl. «W», rote L.spur
TOTAL WEIGHT TOTALGEWICHT		4.7 lbs.	2132 g

ADAPTED FOR: 40 mm L/60 AA Gun

GEEIGNET FÜR: 40 mm L/60 Flak

CARTRIDGE - 40 mm L/60 - PATRONE

Cartridge, HEI-T, SD, w/fuze PD MK 27

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	2890 ft/sec.	881 m/sek
	Chamber pressure Gasdruck	42 000 lbs. □"	2955 kg/cm²
	Range, celling Schussweite, Dach	5100 yds (limited by self destroying device	4660 m (von Zerlegung begrenzt)
	Tracer burn.time L.spur Brennzeit	7-11 sec.	7-11 sek.
PROJECTILE GESCHOSS	Type	HEI-T MK 2 (boat-tailed)	Brandsprengranate L.spur (mit konisch verjüngtem Hinterteil)
	Weight/Gewicht	1.39 lbs. (empty) 1.90 lbs (as fired)	630,5 g (leer) 862 g (komplett)
	Filling/Füllung	TNT/Incendiary Comp.	TNT/Brandsatz
FUZE ZÜNDER	Type	Super Quick, Point det. MK 27 Mod. 1	EKZ MK 27 Mod. 1
	Weight/Gewicht	0,2 lbs.	90.8 g
CARTRIDGE CASE PATRONENHÜLSE	Type	MK 2 Mod. 1 or M 25	MK 2 Mod. 1 oder M 25
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight/Gewicht	1.7 lbs.	771 g
PRIMER ZÜNDUNG	Type	MK 22 Mod. 1 or M 38 A1	MK 22 Mod. 1 oder M 38 A1
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	64 grains	4.15 g
PROPELLANT TREIBLADUNG	Type	NC, multiperforated, smokeless, flashless, non-hygroscopic	NC, siebenlöchig, rauchlos, mündungsfeuerfrei, nicht hygroskopisch
	Weight/Gewicht	0.68 lbs. approx	etwa 310 g
TRACER LEUCHTSPUR	Type	MK 11 Mod. 0 Tracer S. & D.	MK 11 Mod. 0 L.spur & Zerl. «W»
TOTAL WEIGHT TOTALGEWICHT		4.7 lbs.	2132 g

ADAPTED FOR: 40 mm L/60 AA Gun

GEEIGNET FÜR: 40 mm L/60 Flak

CARTRIDGE - 40 mm L/60 - PATRONE

Cartridge, APB C-T M81 A1 (MK4 Mod. 0)

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	2890 ft./sec.	881 m/sek
	Chamber pressure Gasdruck	42 000 lbs/□"	2953 kg/kg/cm²
	Range, horisontal Schussw., horizontal	9475 yds	8660 m
	Penetration 1000 yds Durchschlag 900 m	1,8" homog. armour plate	45 mm homog. Panzerpl.
	Tracer burn.time L.spur Brennzeit	6-10 sec.	6-10 sek
PROJECTILE LEISTUNG	Type	Shot, Armour Piercing. Ballistic Cap. Tracer	Panzergranate mit Haube Leuchtspur
	Weight/Gewicht	1.96 lbs	889 g
	Filling/Füllung	None	Keine
FUZE ZÜNDER		None	Kein
CARTRIDGE CASE PATRONENHÜLSE	Type	MK 2 Mod. 1 or M 25	MK 2 Mod. 1 oder M 25
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight/Gewicht	1.7 lbs.	771 g
PRIMER ZÜNDUNG	Type	MK 22 Mod. 1 or M 38 A 1	MK 22 Mod. 1 oder M 38 A 1
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	64 grains	4.15 g
PROPELLANT TREIBLADUNG	Type	NC, multiperforated, smokeless, flashless, non-hygroscopic	NC, siebenlöchig, rauchlos, mündungsfeuerfrei, nicht hygroskopisch
	Weight/Gewicht	0.68 lbs approx.	etwa 310 g
TRACER LEUTSPUR	Type	Red trace	Rote Leuchtspur
TOTAL WEIGHT TOTALGEWICHT		4.7 lbs	2132 g

ADAPTED FOR: 40 mm L/60 AA Gun

GEEIGNET FÜR: 40 mm L/60 Flak

CARTRIDGE - 40 mm L/60 - PATRONE

Cartridge, Practice, Tracer & SD, MK 2

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	2790 ft. sec.	850 m/sek.
	Chamber pressure Gasdruck	42 000 lbs/□"	2953 kg/cm²
	Range. ceiling Schussweite, Dach	5100 yds (limited by self destroying device)	4660 m (von Zerlegung begrenzt)
	Tracer burn.time L.spur Brennzeit	7-11 sec.	7-11 sek.
PROJECTILE GESCHOSS	Type	Practice, MK 2 (boat-tailed)	Übung, MK 2 Mod. 1 (mit konisch verjüngtem Hinterteil)
	Weight/Gewicht	1.39 lbs (empty) 1.96 lbs (as fired)	630.5 g (leer) 889 g (komplett)
	Fllling/Füllung	Black Powder	Schwarzpulver
FUZE ZÜNDER	Type	Dummy or plug	Exerzierzünder
	Weight/Gewicht	0.2 lbs	90.8 g
CARTRIDGE CASE PATRONENHÜLSE	Type	MK 2 Mod. 1 or M 25	MK 2 Mod. 1 oder M 25
	Material	Brass (Cu/Zn - 70/30)	Messing (Cu/Zn - 70/30)
	Weight/Gewicht	1.7 lbs	771 g
PRIMER ZÜNDUNG	Type	MK 22 Mod. 1 or M 38 A 1	MK 22 Mod. 1 oder M 38 A 1
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	64 grains	4.15 g
PROPELLANT TREIBLADUNG	Type	NC, multiperforated smokeless, flashless, non-hygroscopic	NC, siebenlöchig, rauchlos, mündungsfeuerfrei nicht hygroskopisch
	Weight/Gewicht	0.68 lbs approx	etwa 310 g
TRACER LEUCHTSPUR	Type	MK 11 Mod. 0 Tracer & SD	MK 11 Mod. 0 L.spur & Zerl. «W»
TOTAL WEIGHT TOTALGEWICHT		4.7 lbs	2132 g

ADAPTED FOR: 40 mm L/60 AA Gun

GEEIGNET FÜR: 40 mm L/60 Flak

CARTRIDGE - 40 mm L/60 - PATRONE

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs.)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
N11	112.8	158	3.06	24	1/fbr cntr 24 cntr/wdn box	1/Packhülse 24 Packhülsen/Holzkiste
N12	75.2	110	1.70	16	4/charger clip 4 clip/mtl box	4/Lader 4 Lader/Stahlkiste
N13	28.2	52	1.00	6	1/fbr cntr 6 cntr/wdn box	1/Packhülse 6 Packhülsen/Holzkiste
N14	37.6	60.5	1.29	8	1/fbr cntr 8 cntr/wdn box	1/Packhülse 8 Packhülsen/Holzkiste
N15	56.4	90.5	1.28	12	1/fbr cntr 12 cntr/wdn box	1/Packhülse 12 Packhülsen/Holzkiste
N16	37.6	53.0	0.71	8	4/charger clip 2 clip/mtl box	4/Lader 2 Lader/Stahlkiste

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

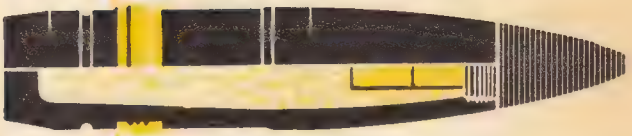
RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

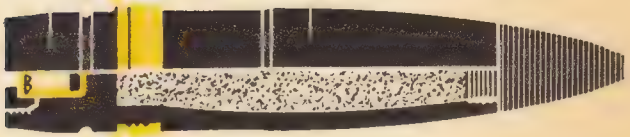
Cartridge - 40 mm L/70 - Patrone

HE, SD
(High Capacity)



HE-T, SD

TP-T, SD, MK2
(Practice)



RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

CARTRIDGE - 40 mm L/70 - PATRONE

HE, SD, M601 w/fuze Fz 104

PERFORMANGE LEISTUNG	Velocity Vo Geschwindigkeit Vo	3280 ft/sec	1000 m/sek
	Chamber pressure Gasdruck	42 000 lbs/□" (max)	2953 kg/cm² (max)
	Range, ceiling Schussweite, Dach	5000 yds approx (limited by S.D. device)	etwa 4570 m (von Zerl. begrenzt)
PROJECTILE GESCHOSS	Type	HE, High Capacity (boattailed)	Sprenggranate (mit konisch verjüngtem Hinterteil)
	Filling/Füllung	TNT/RDX/AL/WX/42/40/15/3	TNT/RDX/AL/WX/42/40/15/3
	Weight/Gewicht	1.25 lbs (empty) 2.15 lbs (as fired)	570 g (leer) 980 g (kompl.)
FUZE ZÜNDER	Type	Super Quick, Point det. S.D.	EKZ, Zerl.
	Weight/Gewicht	0.015 lbs	6.8 g
	SD-time Zerlegungszeit	6—8.5 sec	6—8.5 sek
CARTRIDGE CASE PATRONENHÜLSE	Type	Bofors	Bofors
	Material	Brass (Cu/Zn—70/30	Messing (Cu/Zn—70/30)
	Weight/Gewicht	2.2 lbs	1003 g
PRIMER ZÜNDUNG	Type	Percussion M/38	Treibladungszünder M/38
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	2.36 oz	66.9 g
PROPELLANT TREIBLADUNG	Type	NC, Bof. M1066, smokeless, flashless, non-hygroscopic	NC, Bof. M1066, rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	1.10 lbs approx	etwa 501 g
TRACER LEUCHTSPUR	Type	None	Keine
TOTAL WEIGHT TOTALGEWICTH		5.51 lbs	2502 g

ADAPTED FOR:
GEEIGNET FÜR:

Bofors 40 mm L/70 AA Gun

CARTRIDGE - 40 mm L/70 - PATRONE

HE-T, SD, M601 w/fuze 104

PERFORMANGE LEISTUNG	Velocity Vo Geschwindigkeit Vo	3280 ft/sec	1000 m/sek
	Chamber pressure Gasdruck	42 000 lbs/□" (max)	2953 kg/cm² (max)
	Range, ceiling Schussweite, Dach	5000 yds approx (limited by S.D. device)	etwa 4570 m (von Zerl. begrenzt)
	Tracer, burn.time L.spur, Brennzeit	4—8 sec	4—8 sek
PROJECTILE GESCHOSS	Type	HE-T (boattailed)	Spr.gr., L.spur (mit konisch verjüngtem Hinterteil)
	Filling/Füllung	TNT/RDX/AL/WX/42/40/15/3	TNT/RDX/AL/WX/42/40/15/3
	Weight/Gewicht	1.25 lbs (empty) 2.15 lbs (as fired)	570 g (leer) 980 g (kompl.)
FUZE ZÜNDER	Type	Super Quick, Point det. Pyro. S.D.	EKZ. Zerl.
	Weight/Gewicht	0.015 lbs	6.8 g
	SD-time Zerlegungszeit	6—8.5 sec	6—8.5 sek
CARTRIDGE CASE PATRONENHÜLSE	Type	Bofors	Bofors
	Material	Brass (Cu/Zn—70/30	Messing (Cu/Zn—70/30)
	Weight/Gewicht	2.2 lbs	1003 g
PRIMER ZÜNDUNG	Type	Percussion M/38	Treibladungszünder M/38
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	2.36 oz	66.9 g
PROPELLANT TREIBLADUNG	Type	NC, Bof. M1066, smokeless, flashless, non-hygroscopic	NC, Bof. M1066, rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	1.10 lbs approx	etwa 501 g
TRACER LEUCHTSPUR	Type	Bofors, red trace	Bofors, rote L.spur
TOTAL WEIGHT TOTALGEWICTH		5.51 lbs	2502 g

ADAPTED FOR:
GEEIGNET FÜR:

Bofors 40 mm L/70 AA Gun

CARTRIDGE - 40 mm L/70 - PATRONE

Practice, w/fuze Fz 104

PERFORMANGE LEISTUNG	Velocity Vo Geschwindigkeit Vo	3280 ft/sec	1000 m/sek
	Chamber pressure Gasdruck	42 000 lbs/□" (max)	2953 kg/cm² (max)
	Range, ceiling Schussweite, Dach	5000 yds approx (limited by S.D. device)	etwa 4570 m (von Zerl. begrenzt)
PROJECTILE GESCHOSS	Type	Practice, (boat-tailed)	Übung (mit konisch verjüngtem Hinterteil)
	Filling/Füllung	Inert	Blind geladen
	Weight/Gewicht	1.25 lbs (empty) 2.15 lbs (as fired)	570 g (leer) 980 g (kompl.)
FUZE ZÜNDER	Type	Super Quick, Point det. Pyro. S.D.	EKZ. Zerl.
	Weight/Gewicht	0.015 lbs	6.8 g
	SD-time Zerlegungszeit	6—8.5 sec	6—8.5 sek
CARTRIDGE CASE PATRONENHÜLSE	Type	Bofors	Bofors
	Material	Brass (Cu/Zn—70/30	Messing (Cu/Zn—70/30)
	Weight/Gewicht	2.2 lbs	1003 g
PRIMER ZÜNDUNG	Type	Percussion M/38	Treibladungszünder M/38
	Filling/Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	2.36 oz	66.9 g
PROPELLANT TREIBLADUNG	Type	NC, Bof. M1066, smokeless, flashless, non-hygroscopic	NC, Bof. M1066, rauchlos, münd.feuerfrei, nicht hygroskopisch
	Weight/Gewicht	1.10 lbs approx	etwa 501 g
TRACER LEUCHTSPUR	Type	Bofors, red trace	Bofors, rote L.spur
TOTAL WEIGHT TOTALGEWICTH		5.51 lbs	2502 g

ADAPTED FOR:
GEEIGNET FÜR:

Bofors 40 mm L/70 AA Gun

CARTRIDGE - 40 mm L/70 - PATRONE

Rel.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
O11	11.2	160	3.60	20	1/fbr tube 20 fbr tube/mtl-lnd wdn box	1/Pachülse 20 Packhülsen/Holzkiste mit Zinkfütterung
O12	88.16	127	1.9	16	4/charger clip 4 clip/mtl box	4/Lader 4 Lader/Stahlkiste
O13	44.08	69	1.42	8	1/fbr cntr 8 cntr/wdn box	1/Packhülse 8 Packhülsen/Holzkiste
O14	66.12	104	1.41	12	1/fbr cntr 12 cntr/wdn box	1/Packhülse 12 Packhülsen/Holzkiste
O15	44.08	60	0.92	8	4/charger clip 2 clip/mtl box	4/Lader 2 Lader/Stahlkiste

Other types of packaging to be quoted on request

Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

Cartridge - 105 mm How. - Patrone

HE, M1
(High Capacity)

Practice, M1

RAUFOSS AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

P

CARTRIDGE - 105 mm HOW. - PATRONE

Shell, HE, Semifixed, M1 (Suppl. charge) w/fuze M51A5, S.Q. & Delay

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	1235 ft/sec (zone 7)	375 m/sek (zone 7)
	Chamber pressure Gasdruck	30 000 lbs/□"	2109 kg/cm²
	Range horis Schussweite horiz	10 150 yds (zone 7)	9280 m (zone 7)
PROJECTILE GESCHOSS	Type	HE (High Capacity) M1	Spreng M1
	Filling Füllung	TNT	TNT
	Weight/Gewicht	33 lbs	15 kg
FUZE ZÜNDER	Type	Point. Det. M51A5 Super Quick & Delay	AZ M51A5 mit o. ohne Verzögerung
	Weight/Gewicht	2.14 lbs	971 g
CARTRIDGE CASE PATRONENHÜLSE	Type	M 14	M 14
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weigth/Gewicht	5.9 lbs	2.68 kg
PRIMER ZÜNDUNG	Type	Percussion M28A2	Treibladungszünder M28A2
	Priming mixture Zündsatz	Black Powder	Schwarzpulver
	Weight/Gewicht	0.33 lbs	150 g
PROPELLANT TREIBLADUNG	Type	NC, M1, Dualgran. FNH	NC, M1, Dualgran. FNH
	Weight/Gewicht	Zone 7: 3.04 lbs approx	Zone 7: etwa 1.38 kg
TOTAL WEIGHT TOTALGEWICHT		44 lbs approx	etwa 20 kg

ADAPTED FOR:
GEEIGNET FÜR:

105 mm Howitzer M2
M2A1
M4

CARTRIDGE - 105 mm HOW. - PATRONE

Shell, Practice, Semifixed, M1 w/fuze PD M51A5 SQ & Delay

PERFORMANCE LEISTUNG	Velocity Vo Geschwindigkeit Vo	1235 ft/sec (zone 7)	375 m/sek (zone 7)
	Chamber pressure Gasdruck	30 000 lbs/□"	2109 kg/cm²
	Range horis Schussweite horiz	10 150 yds (zone 7)	9280 m (zone 7)
PROJECTILE GESCHOSS	Type	Practice M1	Übungsgranate M 1
	Filling Füllung	Black Powder	Schwarzpulver
	Weight/Gewicht	33 lbs	15 kg
FUZE ZÜNDER	Type	Point. Det. M51A5 Super Quick & Delay	AZ M51A5 mit o. ohne Verzögerung
	Weight/Gewicht	2.14 lbs	971 g
CARTRIDGE CASE PATRONENHÜLSE	Type	M 14	M 14
	Material	Brass (Cu/Zn-70/30)	Messing (Cu/Zn-70/30)
	Weigth/Gewicht	5.9 lbs	2.68 kg
PRIMER ZÜNDUNG	Type	Percussion M28A2	Treibladungszünder M28A2
	Priming mixture Zündsatz	Black Powder	Schwarzpulver
	Weight/Gewicht	0.33 lbs	150 g
PROPELLANT TREIBLADUNG	Type	NC, M1, Dualgran. FNH	NC, M1, Dualgran. FNH
	Weight/Gewicht	Zone 7: 3.04 lbs approx	Zone 7: etwa 1,38 kg
TOTAL WEIGHT TOTALGEWICHT		44 lbs approx	etwa 20 kg

ADAPTED FOR:
GEEIGNET FÜR:

105 mm Howitzer M2
M2A1
M4

CARTRIDGE - 105 mm HOW. - PATRONE

Ref.	Weight/Gewicht Netto (lbs)	Weight/Gewicht Brutto (lbs)	Volume Cuft	Nos per package Anzahl	Packaging	Verpackung
P11	88	120	1.81	2	1/fbr cntr 2 cntr/wdn box	1/Packhülse 2 Packhülsen/Holzkiste
P12	44	71	0.81	1	1/fbr cntr 1 cntr/mtl cntr	1/Packhülse 1 Packhülse/Stahlhülse
P13	132	156	3.29	3	1/fbr cnt 3 cntr/bndl 1 bndl/cr	1/Packhülse 3 Packhülsen/Bündel 1 Bündel/Holzrahmen
P14						
P15						
P16						
P17						
P18						

Other types of packaging to be quoted on request

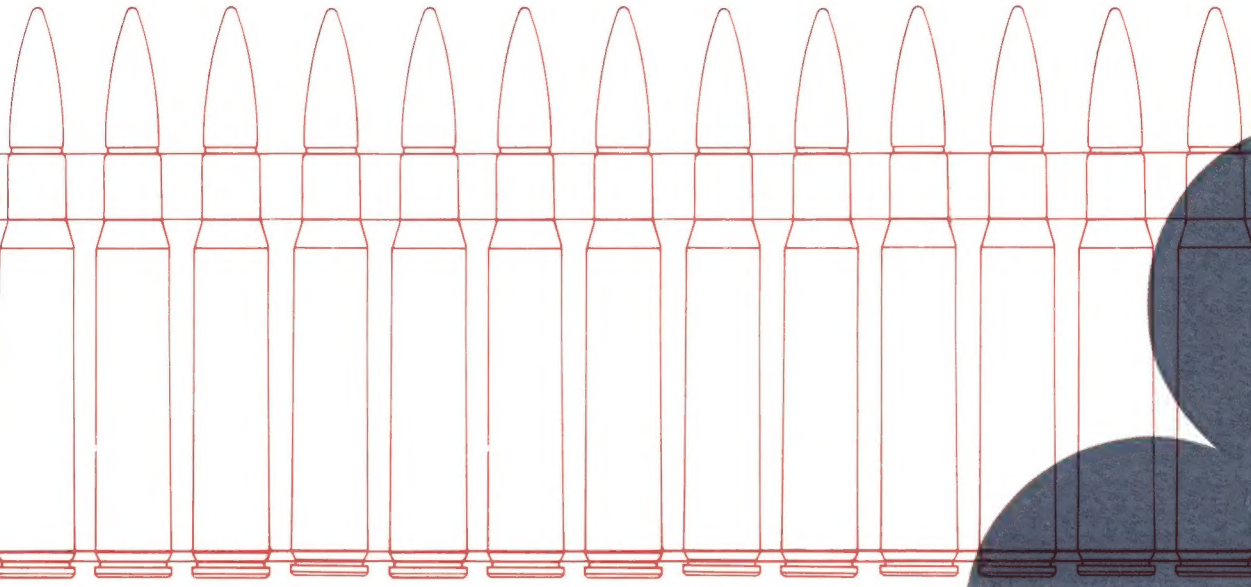
Andere Typen von Verpackungen werden auf Wunsch angeboten

RAUFOSS

AMMUNISJONSFABRIKKER

RAUFOSS — NORWAY

This little inn is maintained by
Raufoss Ammunisjonsfabrikker
to accomodate visitors from abroad



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